Build a Beautiful Demilune Dining Table

Free DIY Woodworking Plans to Build a Demilune Dining Table

Do you remember the demilune table I built? It was really super simple! I created free DIY woodworking plans to build a demilune dining table with a twist… It starts out as a regular demilune table but then – drumroll, please – a fourth leg slides out of the back apron and the top flips out to create a full circular table! How cool is that?

Materials:

- 1-1/4″ pocket hole screws
- 1-1/4″ brad nails

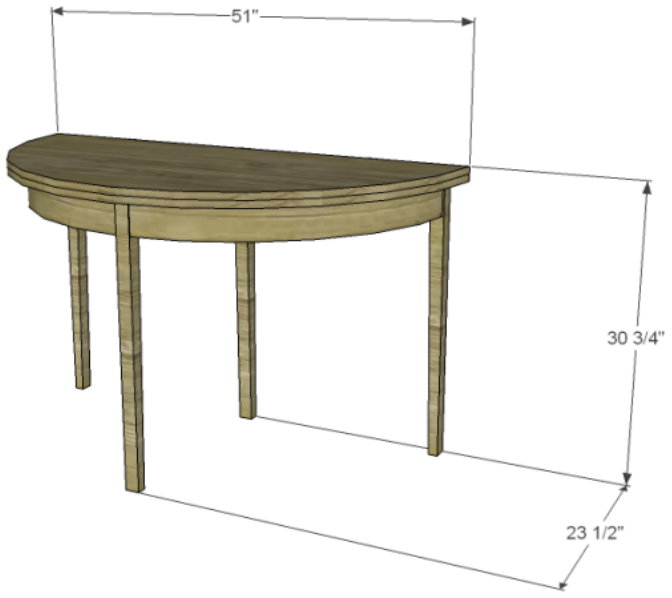
- Edge banding, if desired
- 3 hinges or 1 continuous hinge
- Finishing supplies

Lumber:

- 2 – 2×2 at 6′
- 2 sheets of 3/4″ plywood
- 1 half sheet of 3/4″ MDF or plywood

Cut List:

- 4 – 2×2 at 29-3/4″ – Legs
- 4 – MDF or plywood arcs at 21-1/8″ radius – Front Apron Supports
- 2 – 3/4″ plywood at 3-1/2″ x 35″ – Front Aprons
- 2 – 3/4″ plywood at 17″ – Back Aprons
- 2 – 3/4″ plywood at 25-1/2″ x 51″ – Top
- 2 – 3/4″ plywood at 3-1/2″ x 5″ – Leg Shelf Supports
- 1 – 3/4″ plywood at 4-1/4″ x 10″ – Leg Shelf
- 2 – 3/4″ plywood at 3-1/2″ x 4-1/8″ – Fourth Leg Aprons
- 2 – 3/4″ plywood at 2-3/4″ x 19-1/4″ – Fourth Leg Slides
- 2 – 3/4″ plywood at 2″ x 2-3/4″ – Fourth Leg Stops



Click on the drawings for a larger view!

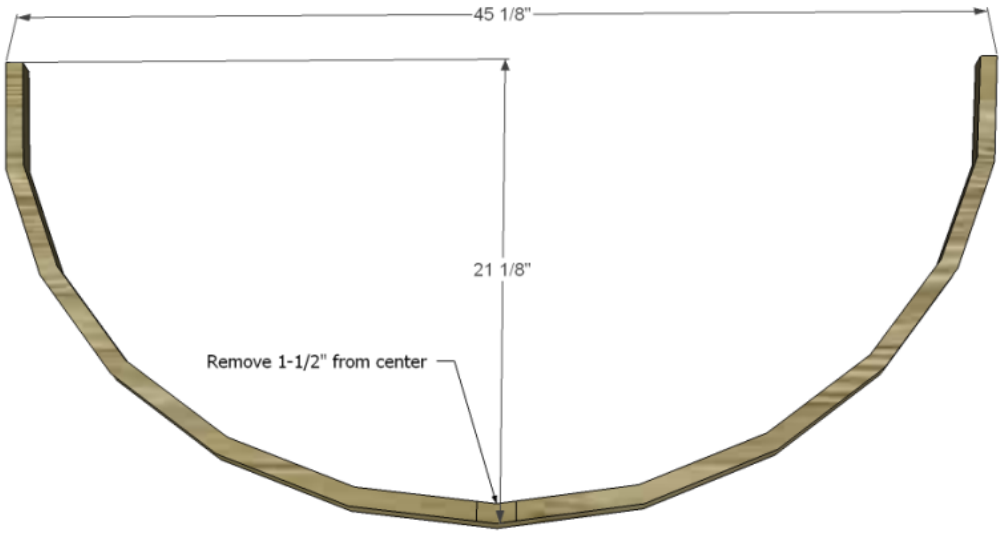
Step One

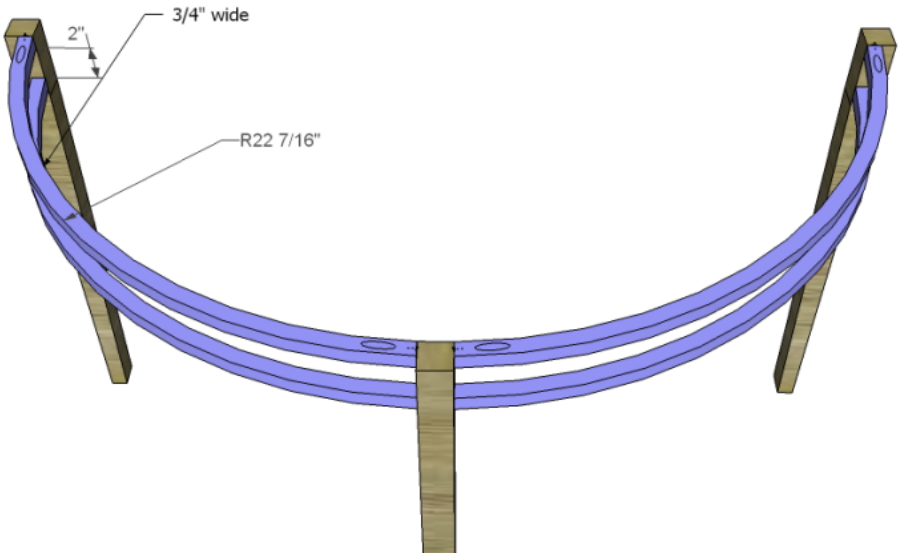
Cut the pieces for the legs. Cut the tapers using a jigsaw or a tapering jig on the table saw. Set the legs aside.

Step Two

To cut the arcs for the front apron supports – Start by marking the center width line on the 2′ x 4′ sheets of material. Draw a half circle with a 21-1/8″ radius. Offset

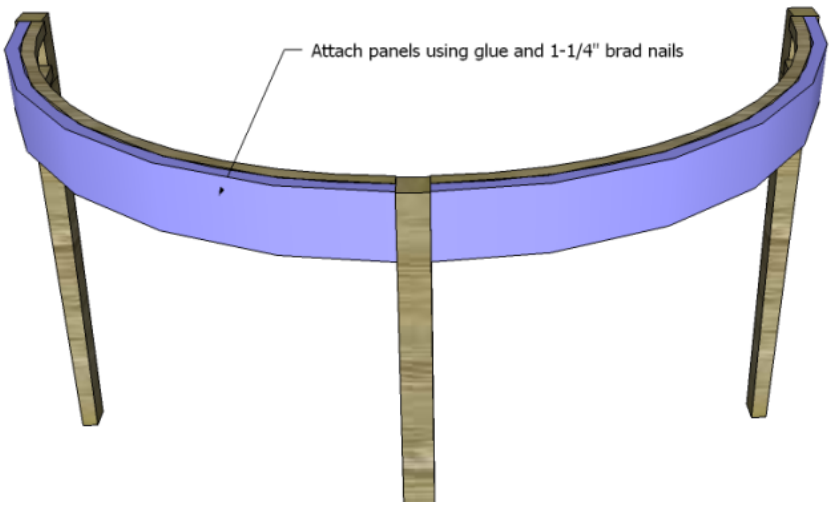
that line by 3/4″. Cut out the piece as shown using a jigsaw. Remove a 1-1/2″ piece from the center as indicated in the drawing – this is for the center front leg. Repeat the process with the other 2′ x 4′ sheet of material. Drill pocket holes in each piece then attach to the legs (with the leg tapers facing to the inside) using glue and 1-1/4″ pocket hole screws.





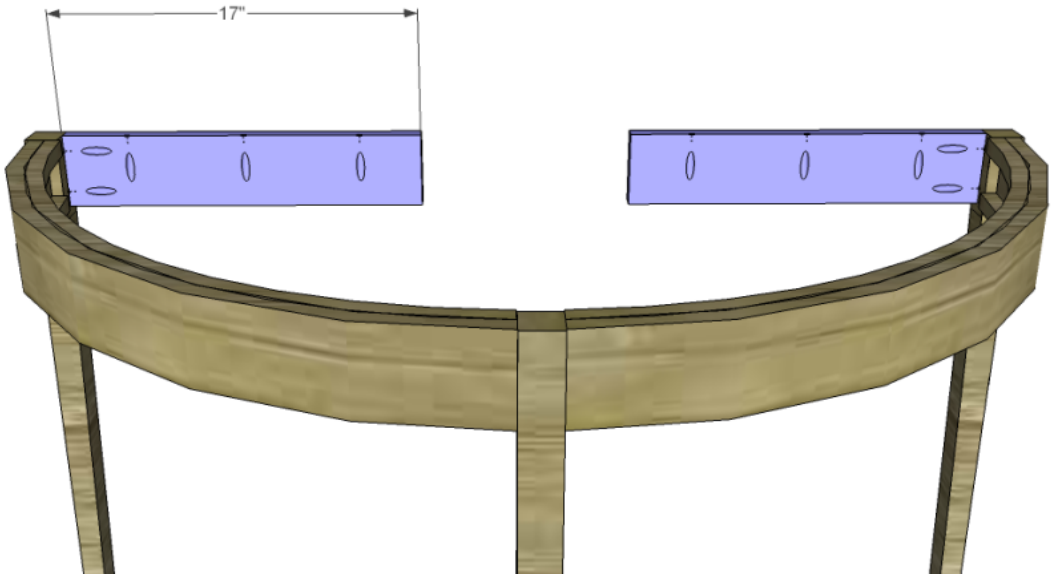
Step Three

Cut the pieces for the front aprons. The pieces are intentionally cut longer that they need to be to allow for “fine tuning”! To allow the pieces to curve along the supports, a series of 1/8″ kerfs will have to be cut long the length of the entire piece and a table saw will be used. Set the depth of the blade so that it will not cut through the last ply of the piece. Start cutting the first kerf about 1″ from the edge of the piece. Move the rip fence on the table saw in 1/4″ increments to cut the remaining kerfs stopping approximately 1″ before the edge of the board. Dry fit the apron over the supports and make any necessary adjustments in length. Attach to the supports using glue and 1-1/4″ brad nails.



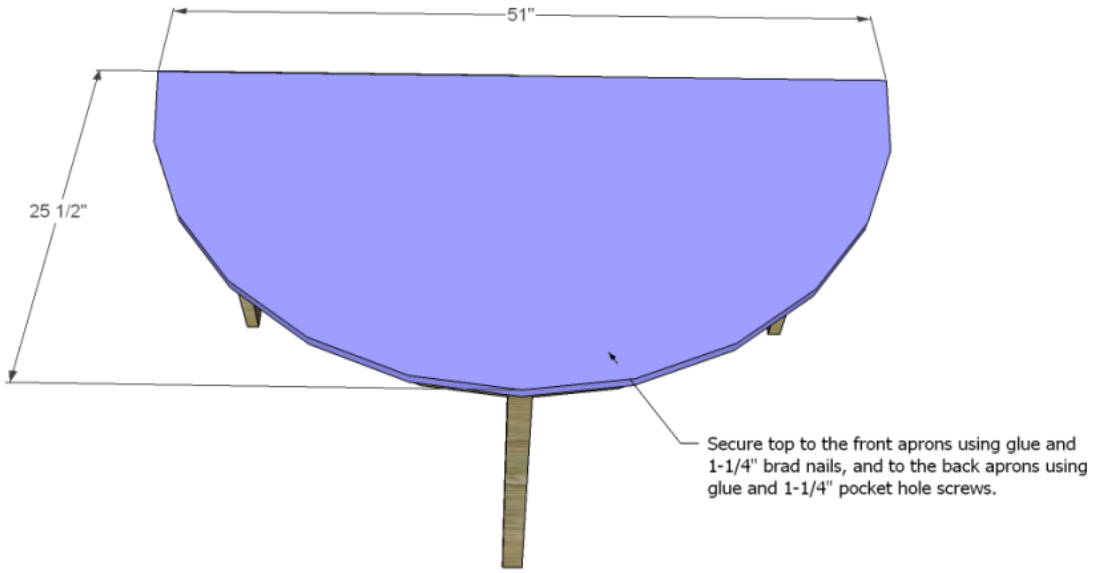
Step Four

Cut the pieces for the back aprons and drill pocket holes as shown. Attach to the legs using glue and 1-1/4″ pocket hole screws.



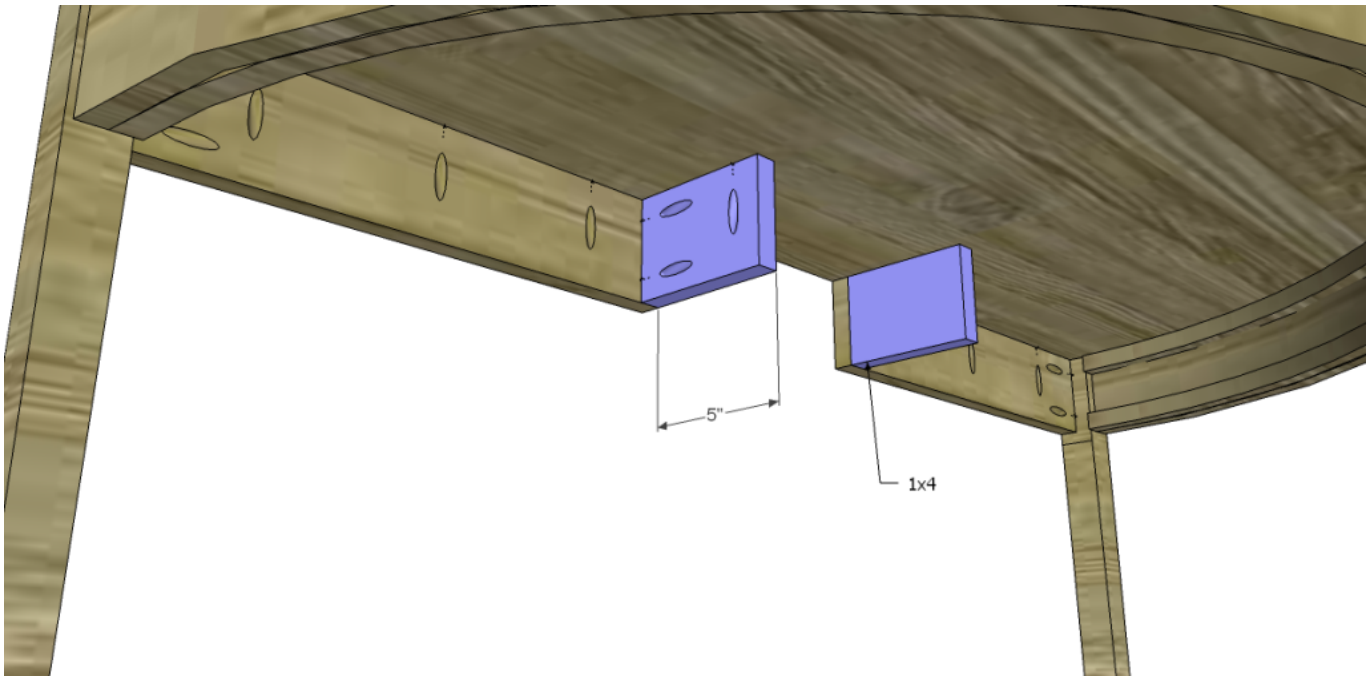
Step Five

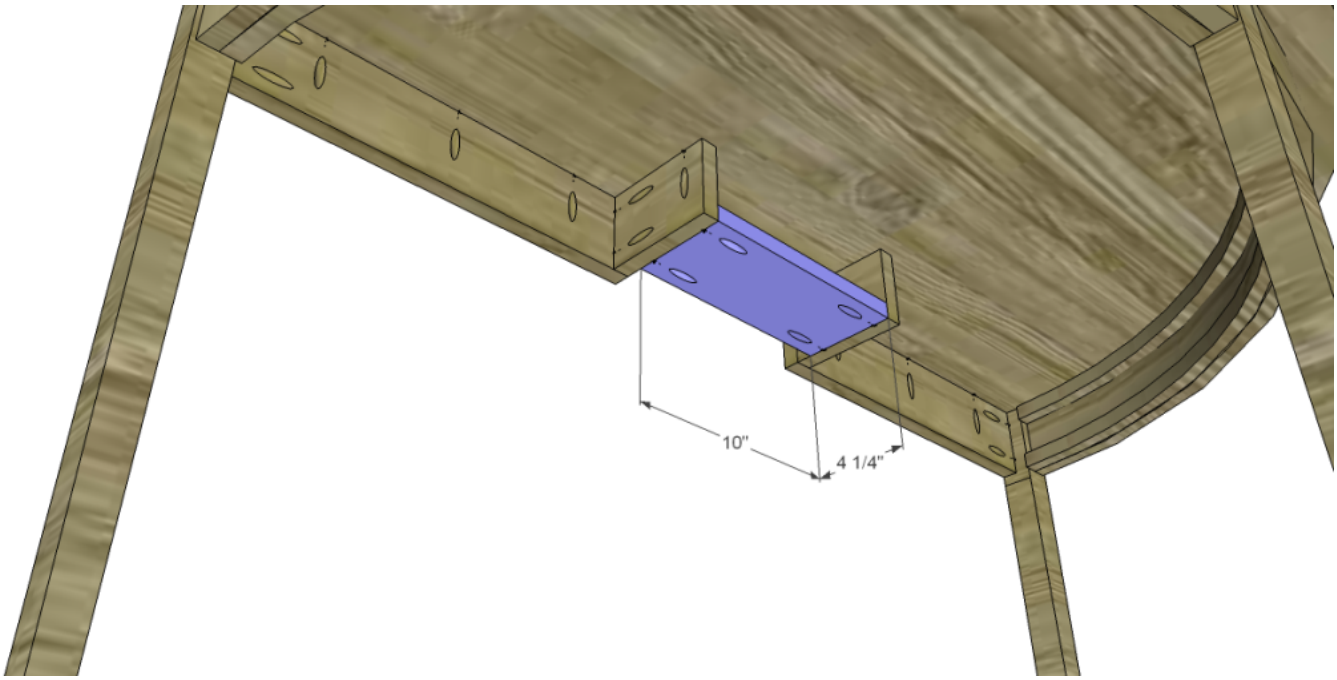
Cut the pieces for the top. The curved edge will overhang the frame by 2″. Secure in place using glue and 1-1/4″ brad nails through the top into the legs and curved aprons. Use 1-1/4″ pocket hole screws to secure the back apron pieces.


51"
25 1/2"
Secure top to the front aprons using glue and 1-1/4" brad nails, and to the back aprons using glue and 1-1/4" pocket hole screws.

Step Six

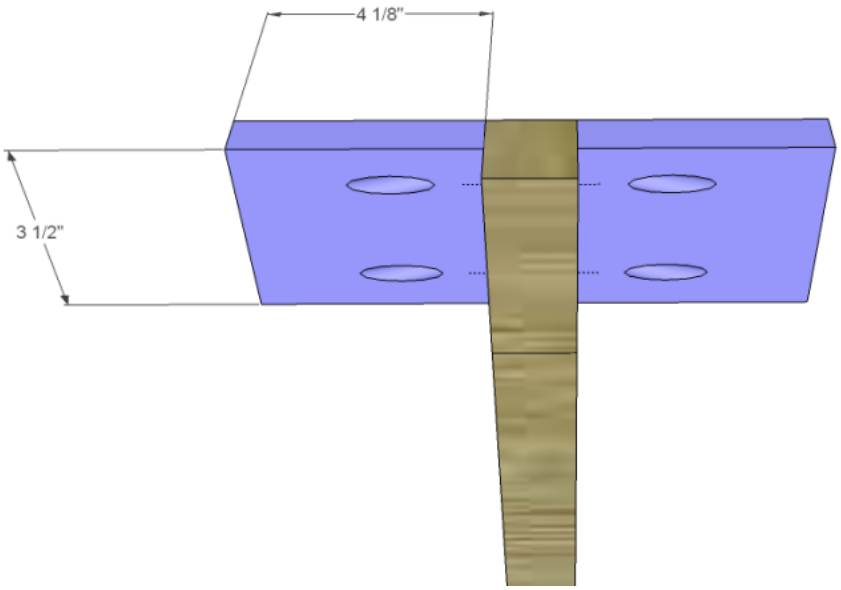
Cut the pieces for the leg shelf as well as the leg shelf supports, then drill pocket holes as shown. Attach the supports to the back apron and top using glue and 1-1/4″ pocket hole screws. Attach the shelf to the supports using glue and 1-1/4″ pocket hole screws. The bottom of the shelf will be flush with the bottom of the shelf supports.





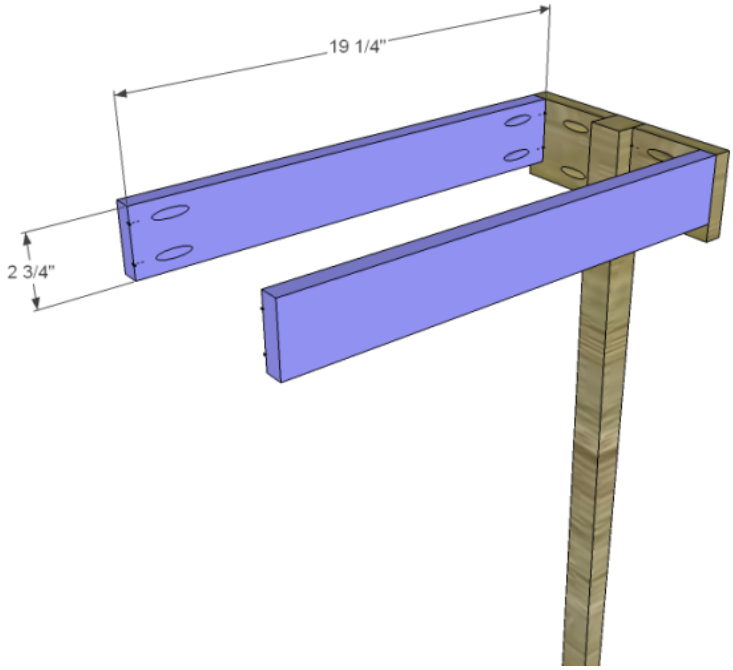
Step Seven

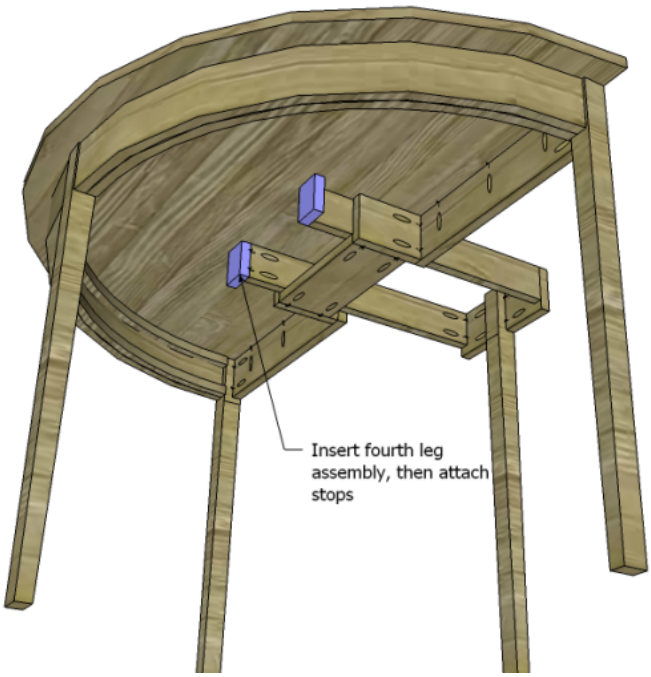
Cut the pieces for the fourth leg aprons and drill pocket holes in one end only. Attach to the remaining end (with the taper facing to the inside) using glue and 1-1/4″ pocket hole screws.



Step Eight

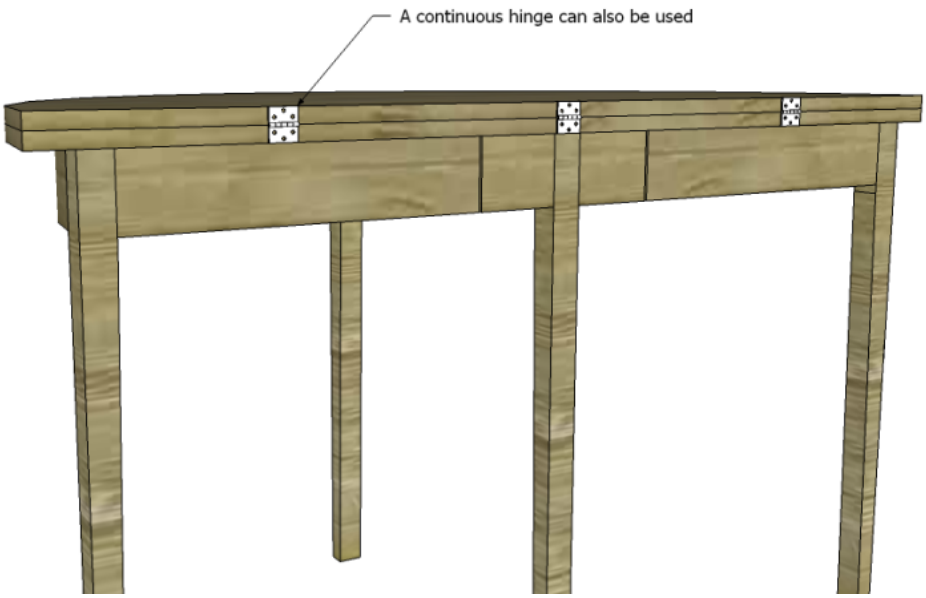
Cut the pieces for the fourth leg slides and stops, then drill pocket holes at each end of the slide pieces. The slides are 3/4″ narrower than the aprons. Attach the slides to the aprons using glue and 1-1/4″ pocket hole screws. The top edge of the slides will be flush with the top edge of the aprons. Insert the slides into the opening at the back of the table on top of the shelf. It should be a fairly tight fit. To help the slide move freely, apply a coat of paste wax to the bottom of the slides, as well as to the top of the shelf. Attach the stops to the slides to keep the assembly from being pulled out of the table.





Step Nine

Stack the other half of the top on the existing top, and secure them to each other using the hinges. A continuous hinge can also be used.



Finish as desired!!

These free DIY woodworking plans to build a Demilune Dining Table are easier to contruct than you may think. the arcs can easily be cut using a jigsaw or a band saw, and cutting the kerfs in the aprons is a breeze! Need help with the plan? contact me at cher {at} designsbystudioc {dot} com or designsbystudioc {at} gmail {dot} com. I would be happy to help!